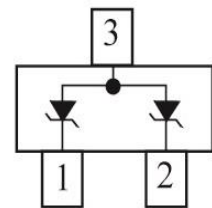
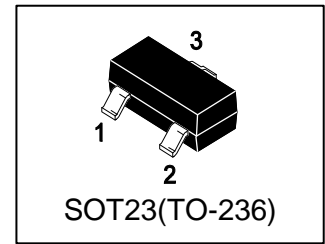


# LGSOT05CLT1G

Dual Transient Voltage Suppressors  
Array for ESD Protection



## 1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- 2 Unidirectional transil functions
- Low leakage current:IR max< 20  $\mu$ A at VRM
- 300W peak pulse power(8/20 $\mu$ s)
- Transient protection for data lines as per IEC61000-4-2(ESD)  $\pm$ 30KV(air)  $\pm$ 30KV(contact)  
IEC61000-4-5(Lightning) see IPPM below

## 2. APPLICATIONS

- Computers
- Printers
- Communication systems

## 3. DEVICE MARKING AND ORDERING INFORMATION

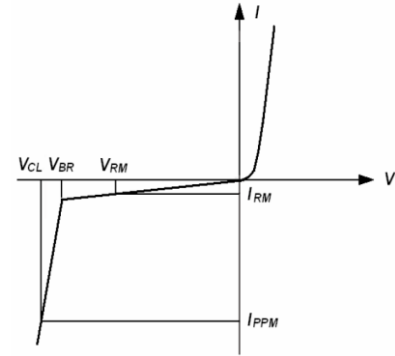
Device	Marking	Shipping
LGSOT05CLT1G	05C	3000/Tape&Reel
LGSOT05CLT3G	05C	10000/Tape&Reel

## 4. ABSOLUTE RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak Pulse Power (tp = 8/20 $\mu$ s)	PPP	300	W
Lead Solder Temperature - Maximum (10 Second Duration)	TL	260	°C
Storage Temperature Range	Tstg	-55 ~ +150	°C
Operating Temperature Range	Top	-40 ~ +125	°C
Maximum junction temperature	Tj	150	°C
Electrostatic discharge	ESD		kV
IEC61000-4-2 air discharge		$\pm$ 30	
IEC61000-4-2 contact discharge		$\pm$ 30	

**5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

Symbol	Parameter
VRM	Stand-off voltage
VBR	Breakdown voltage
VCL	Clamping voltage
IRM	Leakage current
IPPM	Peak pulse current


**6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

DEVICE	VRWM (V)	IR (μA) @VRWM	VBR (V) @IT (Note 1)	IT (mA)	VC (V) @IPP=1A	VC (V) @IPP=5A	IPP(A) @tp=8/20μs	C (pF) f=1MHz
	Max.	Max.	Min.		Max.	Max.	Max.	Max.
LGSOT05CLT1G	5	5	6	1	9.8	12.5	17	220

1. 8/20 waveform used.

7. ELECTRICAL CHARACTERISTICS CURVES

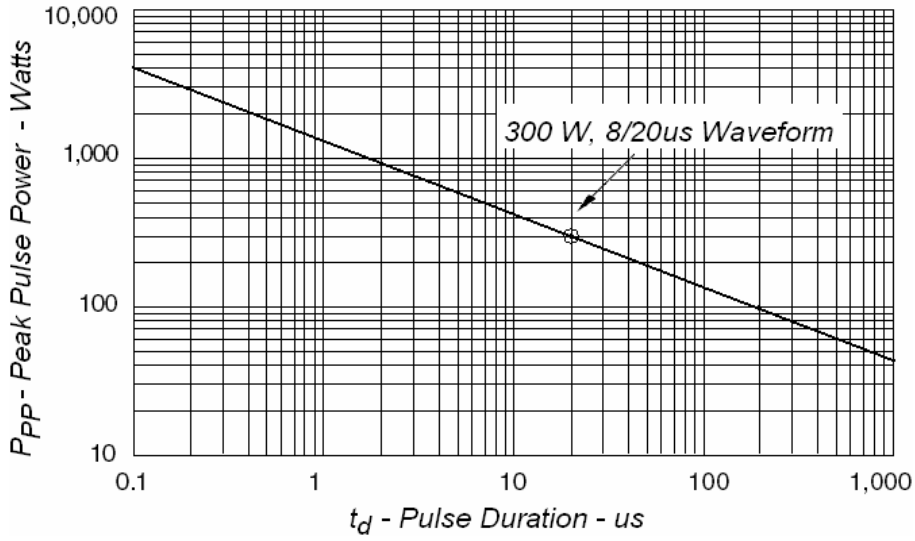


Fig1. Peak Pulse Power VS Pulse Time

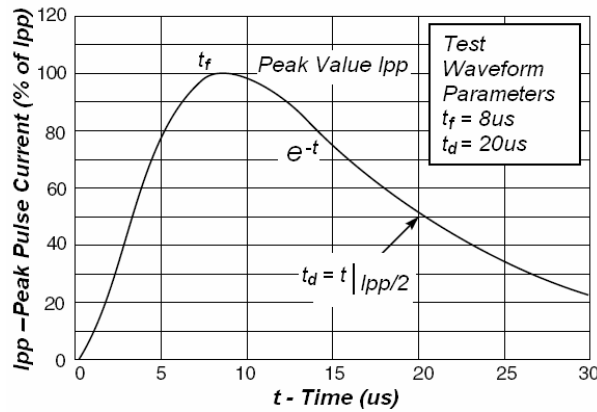


Fig2. Pulse Waveform

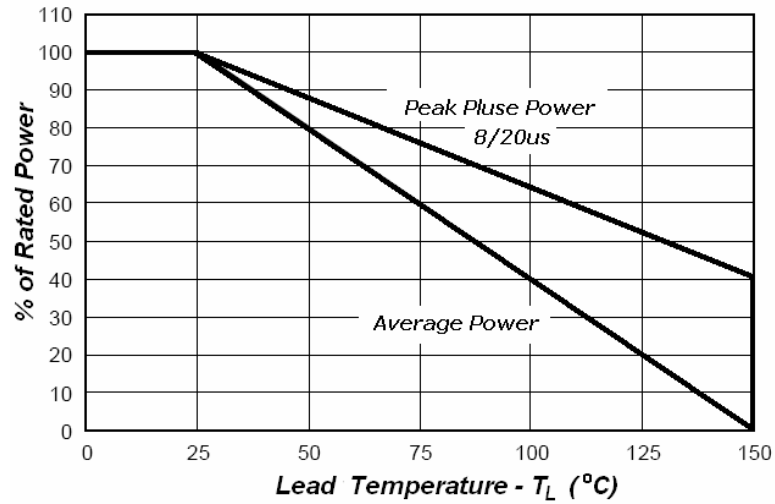
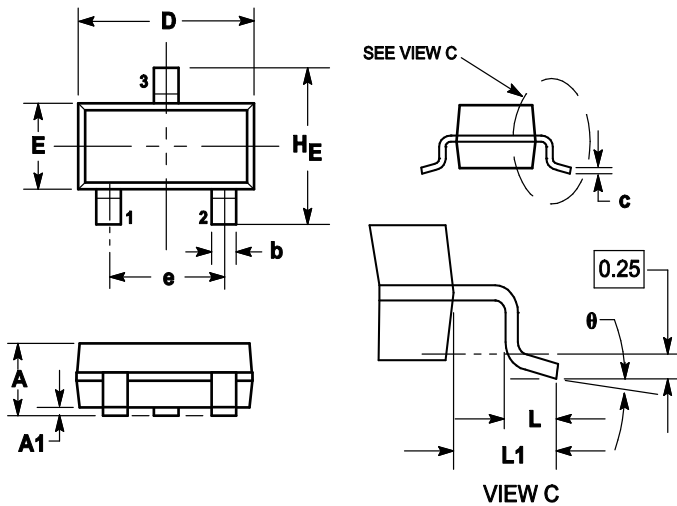


Fig3. Power Derating

## 8. OUTLINE AND DIMENSIONS

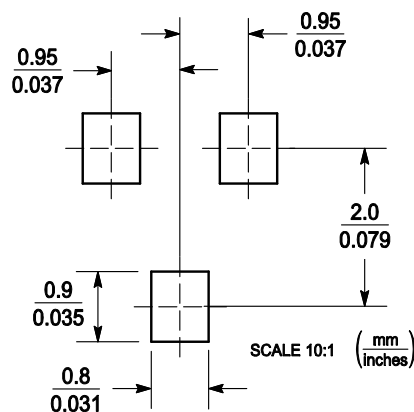
Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.4	2.64	0.083	0.094	0.104
θ	0°	---	10°	0°	---	10°

## 9. SOLDERING FOOTPRINT



## **DISCLAIMER**

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
- Before you use our Products for new Project, you are requested to carefully read this document and fully understand its contents. LRC shall not be in any way responsible or liable for failure, malfunction or accident arising from the use of any LRC's Products against warning, caution or note contained in this document.
- All information contained in this document is current as of the issuing date and subject to change without any prior notice. Before purchasing or using LRC's Products, please confirm the latest information with a LRC sales representative.